



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street

San Francisco, CA 94105-3901

OCT 29 2019

Dr. Matt Miyasato, Deputy Executive Officer
Science and Technology Advancement
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765-4178

Dear Dr. Miyasato:

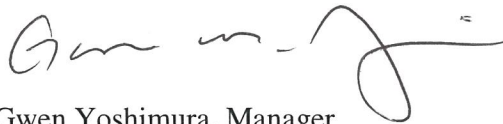
Thank you for your submission of the South Coast Air Quality Management District (SCAQMD) *Annual Air Quality Monitoring Network Plan* on June 26, 2019. We have reviewed the submitted document based on the requirements set forth in 40 CFR Part 58. Based on the information provided in the plan, the U.S. Environmental Protection Agency (EPA) approves all portions of the network plan except those specifically identified below. With this plan approval, we also formally approve an FEM waiver for the following sites, for the time periods specified in Enclosure B to this letter: Central Los Angeles (Main St.) (AQS ID: 06-037-1103-9), Mira Loma (AQS ID: 06-065-8005-3), Long Beach Route 710 (AQS ID: 06-037-4008-3), and Ontario Route 60 (AQS ID: 06-071-0027-3). Please include this waiver approval with next year's network plan. Also, per 40 CFR part 58 Appendix D, section 4.8.2(e), we formally approve the PAMS meteorological waiver request for collecting upper air meteorological and precipitation measurements from locations other than the Los Angeles (Main St.) and Rubidoux NCore sites. Upper air measurements will be collected at the Los Angeles International Airport (LAX) and the Ontario International Airport (ONT); precipitation measurements will be collected by the National Weather Service (NWS) and Federal Aviation Administration (FAA) at Downtown Los Angeles (USC) and Riverside Municipal Airport (RAL).

Please note that we cannot approve portions of the annual network plan for which the information in the plan is insufficient to judge whether the requirement has been met, or for which the information provided does not meet the requirements as specified in 40 CFR 58.10 and the associated appendices. EPA Region 9 also cannot approve portions of the plan for which the EPA Administrator has not delegated approval authority to the regional offices. The first enclosure (*A. Annual Monitoring Network Plan Checklist*) is the checklist EPA used to review your plan for items that are required to be included in the annual network plan along with our assessment of whether the plan submitted by your agency addresses those requirements. Items highlighted in yellow are those EPA Region 9 is not acting on, as we either lack the authority to approve the specific item, or we have determined that a requirement is either not met or information in the plan is insufficient to judge whether the requirement has been met. Items highlighted in green in Enclosure A require attention in order to improve next year's plan.

All comments conveyed via this letter and enclosures should be addressed prior to submittal of next year's annual monitoring network plan to EPA.

If you have any questions regarding this letter or the enclosed comments, please feel free to contact me at (415) 947-4134 or Jennifer Williams (213) 244-1824.

Sincerely,

A handwritten signature in black ink, appearing to read 'Gwen Yoshimura', with a stylized flourish at the end.

Gwen Yoshimura, Manager
Air Quality Analysis Office

Enclosures:

- A. Annual Monitoring Network Plan Checklist
- B. Approval of SCAQMD Request for PM_{2.5} FEM Waiver

cc (via email): Jason Low, SCAQMD
Rene Bermudez, SCAQMD
Jin Xu, California Air Resources Board (CARB)
Kathy Gill, CARB
Michael Miguel, CARB
Michael Werst, CARB
Sylvia Vanderspek, CARB
Webster Tasat, CARB

A. ANNUAL MONITORING NETWORK PLAN CHECKLIST

(Updated July 10, 2018)

Year: 2019

Agency: South Coast Air Quality Management District

40 CFR 58.10(a)(1) requires that each Annual Network Plan (ANP) shall provide for the documentation of the establishment and maintenance of an air quality surveillance system that consists of a network of SLAMS monitoring stations that can include FRM, FEM, and ARM monitors that are part of SLAMS, NCore, CSN, PAMS, and SPM stations.

40 CFR 58.10(a)(1) further directs that, "The plan shall include a statement of whether the operation of each monitor meets the requirements of appendices A, B, C, D, and E of this part, where applicable. The Regional Administrator may require additional information in support of this statement." On this basis, review of the ANPs is based on the requirements listed in 58.10 along with those in Appendices A, C, D, and E.

EPA Region 9 will not take action to approve or disapprove any item for which Part 58 grants approval authority to the Administrator rather than the Regional Administrators, but we will do a check to see if the required information is included and correct. The items requiring approval by the Administrator are: NCore, and Speciation (STN/CSN).

Please note that this checklist summarizes many of the requirements of 40 CFR Part 58, but does not substitute for those requirements, nor do its contents provide a binding determination of compliance with those requirements. The checklist is subject to revision in the future and we welcome comments on its contents and structure.

Key:

White	meets the requirement
Yellow	requirement is not met, or information is insufficient to make a determination. Action requested in next year's plan or outside the ANP process.
Green	item requires attention in order to improve next year's plan.

	ANP requirement	Citation within 40 CFR 58 ¹	Was the information submitted? ² If Y, section or page #s.	Does the information provided ³ meet the requirement? ⁴	Notes
GENERAL PLAN REQUIREMENTS					
1.	Submit plan by July 1 st	58.10 (a)(1)	Y	Y	Plan submitted on June 26, 2019
2.	30-day public comment / inspection period	58.10 (a)(1); 58.10 (c)	Y, p.2	Y	No public comments received
3.	Statement of whether the operation of each monitor meets the requirements of appendices A, B, C, D, and E, where applicable	58.10 (a)(1)	Y, p.2	Y	
4.	Modifications to SLAMS network – case when we are not approving system modifications	58.10 (a)(2); 58.10 (b)(5); 58.10 (e); 58.14	Y, pp. 24-25	Y	Several closures and relocations are noted and require additional information. Please continue to work with EPA Region IX on retroactive waivers and any upcoming closures.
5.	Modifications to SLAMS network – case when we are approving system modifications per 58.14	58.10 (a)(2); 58.10 (b)(5); 58.10 (e); 58.14	N/A	N/A	
6.	Does plan include documentation (e.g., attached approval letter) for system modifications that have been approved since last ANP approval?		N/A	N/A	
7.	Any proposals to remove or move a monitoring station within a period of 18 months following plan submittal	58.10 (b)(5)	Y, pp.24-25 and detailed site reports	Y	Anaheim, Upland, and Hudson are being considered for relocation, however, no timeframe is noted. Please work with EPA to submit information for relocation of these sites when appropriate.
8.	Precision/Accuracy reports submitted to AQS	58.16 (a)	Y, no changes noted	Y, no changes noted	
9.	Annual data certification submitted	58.15	Y, no changes noted	Y, no changes noted	
10.	Statement that SPMs operating an FRM/FEM/ARM that meet Appendix E also meet either Appendix A or an approved alternative. Documentation for any Appendix A approved alternative should be included. ⁵	58.11 (a)(2)	Y, no changes noted	Y, no changes noted	

¹ Unless otherwise noted.

² Response options: NA (Not Applicable), Y, No, or Incomplete.

³ Assuming the information is correct.

⁴ Response options: NA (Not Applicable) – [reason], Y, No, Insufficient to Judge, or Incorrect

⁵ Alternatives to the requirements of appendix A may be approved for an SPM site as part of the approval of the annual monitoring plan, or separately.

	ANP requirement	Citation within 40 CFR 58 ¹	Was the information submitted? ² If Y, section or page #s.	Does the information provided ³ meet the requirement? ⁴	Notes
11.	SPMs operating FRM/FEM/ARM monitors for over 24 months are listed as comparable to the NAAQS or the agency provided documentation that requirements from Appendices A, C, or E were not met. ⁶	58.20 (c)	Y, pp.8, 24-25 and detailed site reports	Y	
12.	For agencies that share monitoring responsibilities in an MSA/CSA: this agency meets full monitoring requirements or an agreement between the affected agencies and the EPA Regional Administrator is in place	App D 2(e)	Y, no changes noted	Y, no changes noted	

GENERAL PARTICULATE MONITORING REQUIREMENTS (PM₁₀, PM_{2.5}, Pb-TSP, Pb-PM₁₀)

13.	Designation of a primary monitor if there is more than one monitor for a pollutant at a site.	App. A 3.2.3	Y, detailed site tables	Incorrect in one instance	Fontana – Arrow Highway lists two primary PM _{2.5} monitors. Based on other information in this table it is likely PM _{2.5} POC 11 is incorrectly listed as “primary” and is a speciated PM _{2.5} method.
14.	Distance between QA collocated monitors. For low volume PM instruments (flow rate < 200 liters/minute) > 1 m. For high volume PM instruments (flow rate > 200 liters/minute) > 2m. [Note: waiver request or the date of previous waiver approval must be included if the distance deviates from requirement.]	App. A 3.2.3.4 (c) and 3.3.4.2 (c)	Y, no changes noted	Y, no changes noted	

PM_{2.5} –SPECIFIC MONITORING REQUIREMENTS

15.	Document how states and local agencies provide for the review of changes to a PM _{2.5} monitoring network that impact the location of a violating PM _{2.5} monitor.	58.10 (c)	Y, no changes noted	Y, no changes noted	
16.	Identification of any PM _{2.5} FEMs and/or ARMs not eligible to be compared to the NAAQS due to poor comparability to FRM(s) [Note 1: must include required data assessment.] [Note 2: Required SLAMS must monitor PM _{2.5} with NAAQS-comparable monitor at the required sample frequency.]	58.10 (b)(13) 58.11 (e)	Y, appendix C	Y	See enclosure B
17.	Minimum # of monitoring sites for PM _{2.5} [Note 1: should be supported by MSA ID, MSA population, DV, # monitoring sites, and # required monitoring	App. D 4.7.1(a) and Table D-5	Y, pp. 26-27	Y	

⁶ This requirement only applies to monitors that are eligible for comparison to the NAAQS per 40 CFR §§58.11(e) and 58.30.

	ANP requirement	Citation within 40 CFR 58¹	Was the information submitted?² If Y, section or page #s.	Does the information provided³ meet the requirement?⁴	Notes
	sites] [Note 2: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]				
18.	Requirements for continuous PM _{2.5} monitoring (number of monitors and collocation)	App. D 4.7.2	Y, pp. 26-27	Y	
19.	FRM/FEM/ARM PM _{2.5} QA collocation	App. A 3.2.3	Y, p. 31	Y	
20.	PM _{2.5} Chemical Speciation requirements for official STN sites	App. D 4.7.4	Y, no changes noted	Y, no changes noted	
21.	Identification of sites suitable and sites not suitable for comparison to the annual PM _{2.5} NAAQS as described in Part 58.30	58.10 (b)(7)	Y, no changes noted	Y, no changes noted	
22.	Required PM _{2.5} sites represent area-wide air quality	App. D 4.7.1(b)	Y, no changes noted	Y, no changes noted	
23.	For PM _{2.5} , within each MSA, at least one site at neighborhood or larger scale in an area of expected maximum concentration	App. D 4.7.1(b)(1)	Y, no changes noted	Y, no changes noted	
24.	If additional SLAMS PM _{2.5} is required, there is a site in an area of poor air quality	App. D 4.7.1(b)(3)	Y, no changes noted	Y, no changes noted	
25.	States must have at least one PM _{2.5} regional background and one PM _{2.5} regional transport site.	App. D 4.7.3	Y, no changes noted	Y, no changes noted	
26.	Sampling schedule for PM _{2.5} - applies to year-round and seasonal sampling schedules (note: date of waiver approval must be included if the sampling season deviates from requirement)	58.10 (b)(4); 58.12(d); App. D 4.7	Y, pp.17-20 and detailed site tables	Insufficient to judge	The plan states that Big Bear was granted an exception at the inception of the program to operate a frequency of 1 in 6 days. Please provide the documentation that this sampling schedule was approved in next year's plan. Table 11 lists the North Long Beach monitor as sampling at a current frequency of daily, but site tables lists frequency as 1-in-3.
27.	Frequency of flow rate verification for automated and manual PM _{2.5} monitors	App. A 3.2.1	Y, detailed site tables	Y	
28.	Dates of two semi-annual flow rate audits conducted in CY2018 for PM _{2.5} monitors [Note: 5-7 month interval is recommended but not a requirement.]	App. A 3.2.2	Y, detailed site tables	Missing in one instance	Only one flow rate audit is listed for the PM _{2.5} POC 1 monitor at Anaheim.

	ANP requirement	Citation within 40 CFR 58 ¹	Was the information submitted? ² If Y, section or page #s.	Does the information provided ³ meet the requirement? ⁴	Notes
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PM₁₀ –SPECIFIC MONITORING REQUIREMENTS

29.	Minimum # of monitoring sites for PM ₁₀ [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App. D, 4.6 (a) and Table D-4	Y, p. 28	Y	
30.	Manual PM ₁₀ method collocation (note: continuous PM ₁₀ does not have this requirement)	App. A 3.3.4	Y, p. 31	Y	
31.	Sampling schedule for PM ₁₀	58.10 (b)(4); 58.12(e); App. D 4.6	Y, p. 12	Insufficient to judge	Sampling frequency requirements are not separated by FRM and FEM. In next year's plan please include all PM ₁₀ SLAMS in Table 6.
32.	Frequency of flow rate verification for automated and manual PM ₁₀ monitors	App. A 3.3.1 and 3.3.2	Y, detailed site tables	Y	
33.	Dates of two semi-annual flow rate audits conducted in CY2018 for PM ₁₀ monitors [Note: 5 -7 month interval is recommended but not a requirement.]	App. A 3.3.3	Y, detailed site tables	Y	

Pb –SPECIFIC MONITORING REQUIREMENTS

34.	Minimum # of monitors for non-NCore Pb [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App D 4.5	Y, p.30	Y	
35.	Pb collocation: for non-NCore sites	App A 3.4.4 and 3.4.5	Y, p.31	Y	
36.	Any source-oriented Pb site for which a waiver has been granted by EPA Regional Administrator	58.10 (b)(10)	Y, no changes noted	Y, no changes noted	
37.	Any Pb monitor for which a waiver has been requested or granted by EPA Regional Administrator for use of Pb-PM ₁₀ in lieu of Pb-TSP	58.10 (b)(11)	Y, no changes noted	Y, no changes noted	
38.	Designation of any Pb monitors as either source-oriented or non-source-oriented	58.10 (b)(9)	Y, no changes noted	Y, no changes noted	
39.	Sampling schedule for Pb	58.10 (b)(4); 58.12(b); App A 3.4.4.2 (c) and 3.4.5.3 (c)	Y, no changes noted	Y, no changes noted	

	ANP requirement	Citation within 40 CFR 58¹	Was the information submitted?² If Y, section or page #s.	Does the information provided³ meet the requirement?⁴	Notes
40.	Frequency of flow rate verification for Pb monitors audit	App A 3.4.1 and 3.4.2	Y, detailed site tables	Y	
41.	Dates of two semi-annual flow rate audits conducted in CY2018 for Pb monitors [Note: 5 -7 month interval is recommended but not a requirement.]	App A 3.4.3	Y, detailed site tables	Y	

GENERAL GASEOUS MONITORING REQUIREMENTS

42.	Frequency of one-point QC check (gaseous)	App. A 3.1.1	Y, detailed site tables	Y	
43.	Date of Annual Performance Evaluation (gaseous) conducted in CY2018	App. A 3.1.2	Y, detailed site tables	Y	

O₃ –SPECIFIC MONITORING REQUIREMENTS

44.	Minimum # of monitoring sites for O ₃ [Note 1: should be supported by MSA ID, MSA population, DV, # monitoring sites, and # required monitoring sites] [Note 2: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.] [Note 3: monitors that do not meet traffic count/distance requirements to be neighborhood or urban scale (40 CFR Appendix E, Table E-1) cannot be counted towards meeting minimum monitoring requirements]	App D 4.1(a) and Table D-2	Y, p. 26	Y	
45.	Identification of maximum concentration O ₃ site(s)	App D 4.1 (b)	Y, no changes noted	Y, no changes noted	
46.	Sampling season for O ₃ (Note: Waivers must be renewed annually. EPA expects agencies to submit re-evaluations of the relevant data each year with the ANP. EPA will then respond as part of the ANP response.)	58.10 (b)(4); App D 4.1(i)	Y, detailed site tables	Y	
47.	A plan for making Photochemical Assessment Monitoring Stations (PAMS) measurements, if applicable. The plan shall provide for the required PAMS measurements to begin by June 1, 2019.	58.10 (a)(10)	Y, appendix D	Y	

NO₂ –SPECIFIC MONITORING REQUIREMENTS

48.	Minimum monitoring requirements for area-wide NO ₂ monitor in location of expected highest NO ₂	App D 4.3.3	Y, p. 28	Y	
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	ANP requirement	Citation within 40 CFR 58 ¹	Was the information submitted? ² If Y, section or page #s.	Does the information provided ³ meet the requirement? ⁴	Notes
	concentrations representing neighborhood or larger scale (operation required by 1/1/13)				
49.	Minimum monitoring requirements for susceptible and vulnerable populations monitoring (aka RA40) NO ₂ (operation required by January 1, 2013)	App D 4.3.4	Y, no changes noted	Y, no changes noted	
50.	Identification of required NO ₂ monitors as either near-road, area-wide, or vulnerable and susceptible population (aka RA40)	58.10 (b)(12)	Y, no changes noted	Y, no changes noted	
NEAR ROADWAY – SPECIFIC MONITORING REQUIREMENTS					
In CBSAs ≥ 2.5 million, the following near-roadway minimum monitoring requirements apply:					
51.	Two NO ₂ monitors	App. D 4.3.2(a); 58.13(c)(3) and (4)	Y, no changes noted	Y, no changes noted	
52.	One CO monitor	App. D 4.2.1(a); 58.13(e)(2)	Y, no changes noted	Y, no changes noted	
53.	One PM _{2.5} monitor	App. D 4.7.1(b)(2); 58.13(f)(2)	Y, no changes noted	Y, no changes noted	
In CBSAs ≥ 1 million and AADT ≥ 250K, the following near-roadway minimum monitoring requirements apply:					
54.	Two NO ₂ monitors	App. D 4.3.2(a); 58.13(c)(3) and (4)	Y, no changes noted	Y, no changes noted	
55.	One CO monitor (by 1/1/2017)	App. D 4.2.1(a); 58.13(e)(2)	Y, no changes noted	Y, no changes noted	
56.	One PM _{2.5} monitor (by 1/1/2017)	App. D 4.7.1(b)(2); 58.13(f)(2)	Y, no changes noted	Y, no changes noted	
In CBSAs ≥ 1 million and ≤ 2.5 million AND AADT < 250K, the following near-roadway minimum monitoring requirements apply:					
57.	One NO ₂ monitors	App. D 4.3.2(a); 58.13(c)(3)	Y, no changes noted	Y, no changes noted	
58.	One CO monitor (by 1/1/2017)	App. D 4.2.1(a); 58.13(e)(2)	Y, no changes noted	Y, no changes noted	
59.	One PM _{2.5} monitor (by 1/1/2017)	App. D 4.7.1(b)(2); 58.13(f)(2)	Y, no changes noted	Y, no changes noted	

	ANP requirement	Citation within 40 CFR 58 ¹	Was the information submitted? ² If Y, section or page #s.	Does the information provided ³ meet the requirement? ⁴	Notes
SO₂ –SPECIFIC MONITORING REQUIREMENTS					
60.	Minimum monitoring requirements for SO ₂ based on PWEI and/or RA required monitors under Appendix D 4.4.3 [Note: Only monitors considered to be required SLAMs are eligible to be counted towards meeting minimum monitoring requirements.]	App D 4.4	Y, no changes noted	Y, no changes noted	
61.	Monitors used to meet Data Requirements Rule (operational no later than January 1, 2017.)	51.1203(c)	Y, no changes noted	Y, no changes noted	
NCORE –SPECIFIC MONITORING REQUIREMENTS					
62.	NCore site and all required parameters operational: year-round O ₃ , SO ₂ , CO, NO _y , NO, PM _{2.5} mass, PM _{2.5} continuous, PM _{2.5} speciation, PM _{10-2.5} mass, resultant wind speed at 10m, resultant wind direction at 10m, ambient temperature, relative humidity. NO _y waiver, if applicable.	App. D 3(b)	Y, no changes noted	Y, no changes noted	
SITE OR MONITOR - SPECIFIC REQUIREMENTS (OFTEN INCLUDED IN DETAILED SITE INFORMATION TABLES)					
63.	AQS site identification number for each site	58.10 (b)(1)	Y, no changes noted	Y, no changes noted	
64.	Location of each site: street address and geographic coordinates	58.10 (b)(2)	Y, no changes noted	Y, no changes noted	
65.	MSA, CBSA, CSA or other area represented by the monitor	58.10 (b)(8)	Y, no changes noted	Y, no changes noted	
66.	Parameter occurrence code for each monitor	Needed to determine if other requirements (e.g., min # and collocation) are met	Y, no changes noted	Y, no changes noted	
67.	Basic monitoring objective for each monitor	App D 1.1; 58.10 (b)(6)	Y, no changes noted	Y, no changes noted	
68.	Site type for each monitor	App D 1.1.1	Y, no changes noted	Y, no changes noted	
69.	Monitor type for each monitor, and Network Affiliation(s) as appropriate	Needed to determine if other			

	ANP requirement	Citation within 40 CFR 58 ¹	Was the information submitted? ² If Y, section or page #s.	Does the information provided ³ meet the requirement? ⁴	Notes
		requirements (e.g., min # and collocation) are met			
70.	Scale of representativeness for each monitor as defined in Appendix D	58.10(b)(6); App D	Y, no changes noted	Y, no changes noted	
71.	Parameter code for each monitor	Needed to determine if other requirements (e.g., min # and collocation) are met	Y, detailed site reports	Insufficient to judge	Parameter codes are missing for the following sites: <ul style="list-style-type: none"> All pollutants (except PM_{2.5}) at Lake Elsinore Pb, PM₁₀ at LAX-Hastings
72.	Method code and description (e.g., manufacturer & model) for each monitor	58.10 (b)(3); App C 2.4.1.2	Y, detailed site reports	Y	
73.	Sampling start date for each monitor	Needed to determine if other requirements (e.g., min # and collocation) are met	Y, detailed site reports	Y	
74.	Distance of monitor from nearest road	App E 6	Y, no changes noted	Y, no changes noted	
75.	Traffic count of nearest road	App E	Y, no changes noted	Y, no changes noted	
76.	Groundcover	App E 3(a)	Y, no changes noted	Y, no changes noted	
77.	Probe height	App E 2	Y, detailed site tables	Y	
78.	Distance from supporting structure (vertical and horizontal, if applicable, should be provided)	App E 2	Y, detailed site tables	Y	
79.	Distance from obstructions on roof (horizontal distance to the obstruction and vertical height of the obstruction above the probe should be provided)	App E 4(b)	Y, no changes noted	Y, no changes noted	
80.	Distance from obstructions not on roof (horizontal distance to the obstruction and vertical height of the obstruction above the probe should be provided)	App E 4(a)	Y, no changes noted	Y, no changes noted	
81.	Distance from the drip line of closest tree(s)	App E 5	Y, detailed site reports	Not meeting requirement in one instance	Pasadena – 6m to tree
82.	Distance to furnace or incinerator flue	App E 3(b)	Y, detailed site reports	Insufficient to judge	Pico Rivera – 4m to flue. No discussion of predominant wind direction.

	ANP requirement	Citation within 40 CFR 58¹	Was the information submitted?² If Y, section or page #s.	Does the information provided³ meet the requirement?⁴	Notes
83.	Unrestricted airflow (expressed as degrees around probe/inlet or percentage of monitoring path)	App E, 4(a) and 4(b)	Y, detailed site reports	Insufficient to judge	Crestline – 225 degrees of unobstructed airflow
84.	Probe material (NO/NO ₂ /NO _y , SO ₂ , O ₃ ; For PAMS: VOCs, Carbonyls)	App E 9	Y, no changes noted	Y, no changes noted	
85.	Residence time (NO/NO ₂ /NO _y , SO ₂ , O ₃ ; For PAMS: VOCs, Carbonyls)	App E 9	Y, no changes noted	Y, no changes noted	

Public Comments on Annual Network Plan

Were comments submitted to the S/L/T agency during the public comment period?	No
Were comments included in ANP submittal?	N/A
Were any of the comments substantive? If Y, which ones? If comments were not substantive provide rationale.	N/A
Were S/L/T responses to substantive comments included in ANP submittal?	N/A
Were the S/L/T responses to substantive comments adequate?	N/A
Do the substantive comments require separate EPA response (i.e., agency response wasn't adequate)?	N/A
Are the sections of the annual network plan that received substantive comments approvable after consideration of comments? If Y, provide rationale	N/A

B. Approval of the SCAQMD Request for PM_{2.5} FEM Waiver

In the 2019 annual network plan for SCAQMD, your agency requested EPA's approval to consider the 2016-2018 PM_{2.5} data from your continuous federal equivalent method (FEM) monitors at the following sites as not eligible for comparison to the NAAQS: Central Los Angeles/Los Angeles (Main St.) (AQS ID: 06-037-1103-9), Rubidoux (AQS ID: 06-065-8001-9), Mira Loma (AQS ID: 06-065-8005-3), Long Beach Route 710 (AQS ID: 06-037-4008-3), and Ontario Route 60 (AQS ID: 06-071-0027-3). This enclosure is in response to your request and approves the monitors listed in the table below for the specified dates as not eligible for comparison to the NAAQS (i.e., provides a waiver for NAAQS comparability). EPA is not approving the request for the Rubidoux (AQS ID: 06-065-8001-9) monitor as this monitor is eligible for comparison to the NAAQS.

According to 40 CFR 58.11(e), in order to be considered not eligible for comparison to the NAAQS, continuous FEM PM_{2.5} data must be shown to not meet the criteria in 40 CFR 53 Table C-4. These criteria describe the maximum allowable multiplicative and additive bias between filter-based federal reference method (FRM) PM_{2.5} monitor and a Class III continuous FEM PM_{2.5} monitor operating at the same site. EPA based its evaluation on the criteria in 40 CFR 53 as described by our memo dated April 20, 2013 and its attached document titled, "Instructions and Template for Requesting that data from PM_{2.5} Continuous FEMs are not compared to the NAAQS."

We reviewed your request for 2016-2018 data and have determined that the following monitors do not meet the bias criteria in 40 CFR 53 and are approved as not eligible for comparison to the NAAQS for the noted time periods:

Site Name	AQS ID-Parameter Code-POC	Begin Date	End Date
Central Los Angeles (Main St.)	06-037-1103-9	01/01/2016	12/31/2018
Mira Loma	06-065-8005-3	01/01/2016	12/31/2018
Long Beach Route 710	06-037-4008-3	01/01/2016	12/31/2018
Ontario Route 60	06-071-0027-3	08/01/2016	12/31/2018

Your request stated that you consider the continuous PM_{2.5} data of sufficient quality to report to the AQI and will be submitting the data to AIRNow. As such, it is appropriate to submit the data from the monitors and dates in the table above to AQS under the parameter code 88502.

In providing the waiver for the data in the timeframes listed above, EPA expects that SCAQMD will continue to work to improve the comparability of the continuous PM_{2.5} FEM monitors and their filter-based monitors. If SCAQMD intends to submit data from these monitors under a parameter code other than 88101, an updated analysis of the bias for each FEM monitor should be included in future annual network plans for a renewed waiver approval.

In addition, since the intent of such a waiver is to allow more time for method and operational improvements to meet the required bias, SCAQMD must develop a performance assessment and improvement plan to be approved by EPA that describes how the agency will track the

performance of these monitors on a quarterly or more frequent basis, as well as the activities SCAQMD intends to take to address any continuing performance issues.

Although the Rubidoux monitor did not pass the correlation of reference method and method measurements test of ≥ 0.95 for a $CCV \geq 0.5$, this monitor met the bias criteria in 40 CFR 53 and is eligible for comparison to the NAAQS for the time period of 01/01/2016 – 12/31/2018.

According to 40 CFR 58.11(e)(6):

The key statistical metric to include in an assessment is the bias (both additive and multiplicative) of the $PM_{2.5}$ continuous FEM(s) compared to a collocated FRM(s). Correlation is required to be reported in the assessment, but failure to meet the correlation criteria, by itself, is not cause to exclude data from a continuous FEM monitor.

As such, it is appropriate to submit the data from the Rubidoux monitor and specified dates above to AQS under the parameter code 88101.

Your request also noted that the $PM_{2.5}$ FEM datasets for Anaheim (AQS ID: 06-059-0007-3) and South Long Beach (AQS ID: 06-037-4004-3) now pass bias requirements to be included in the NAAQS and will be reclassified in AQS from 88502 in AQS to 88101 for the applicable time period. EPA agrees with these reclassifications.

EPA Evaluation of the Request for Exclusion of PM_{2.5} Continuous FEM Data

2016-2018

Site Name	Site ID	Cont POC	Method Description	PM _{2.5} Cont. Analysis Begin Date	PM _{2.5} Cont. Analysis End Date	Continuous/ FRM Sampler pairs per season	Slope (m)	Intercept (y)	Meets bias requirement	Correlation (r)
<i>Sites with PM_{2.5} continuous FEMs that are collocated with FRMs:</i>										
Central Los Angeles (Main St.)	06-037-1103	9	Met-One BAM 1020 w/VSCC	01/01/2016	12/31/2018	Winter = 238 Spring = 264 Summer = 261 Fall = 269 Total = 1032	1.07	2.65	No	0.94
Rubidoux	06-065-8001	9	Met-One BAM 1020 w/VSCC	01/01/2016	12/31/2018	Winter = 246 Spring = 257 Summer = 262 Fall = 264 Total = 1029	1.02	1.09	Yes	0.94
Mira Loma	06-065-8005	3	Met-One BAM 1020 w/VSCC	01/01/2016	12/31/2018	Winter = 231 Spring = 244 Summer = 260 Fall = 251 Total = 986	0.95	2.71	No	0.95
Long Beach Route 710	06-037-4008	3	Thermo BAM 5014i w/VSCC	01/01/2016	12/31/2018	Winter = 222 Spring = 243 Summer = 257 Fall = 212 Total = 934	0.98	2.42	No	0.93
Ontario Route 60	06-071-0027	3	Thermo BAM 5014i w/VSCC	08/01/2016	12/31/2018	Winter = 255 Spring = 244 Summer = 231 Fall = 231 Total = 961	0.99	2.56	No	0.92

